

REMARKS

Claims 1 - 20 are pending, with base claims 1 and 3 having been amended above so as to patentably distinguish claims 1 - 20 from the prior art of record, as will be discussed below.

Claims 1 and 9 stand rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 6,067,106 to Ishibe et al. Reconsideration of this rejection is respectfully requested. Claim 1 has been amended above so as to require “distortion of said laser array imaging lens does not exceed 2 %”. Support for the newly added wording to claim 1 can be found in Figs. 6C and 7C of the drawings as filed. Direct antecedent basis for what is now claimed has been added to the specification, without adding new matter, via the above amendment. Amended claim 1 and claim 9 (that depends from claim 1) are no longer anticipated by Ishibe et al., which uses an $f \cdot \theta$ scanning lens having distortion that far exceeds 2 % in conjunction with a rotating scanning mirror to sequentially image a light source onto a scan line. As the body of claim 1 now refers back to the wording recited in the preamble of claim 1, the Examiner can no longer assert that the claim preamble of claim 1 should be ignored in determining the scope of what is claimed. Moreover, the Ishibe et al. apparatus has the same inherent problems as the known prior art discussed at page 1, lines 1 - 17 of Applicant’s specification. On the other hand, the present invention enables an entire line of laser elements that are simultaneously modulated with image information to be simultaneously imaged onto a surface, thereby accomplishing the equivalent of extremely fast ‘scanning’ of a line of image information while eliminating the need for a scanning mirror. Thus, amended claim 1 and claim 9 (that depends from amended claim 1) are not anticipated by Ishibe et al. nor suggested by the prior art of record.

Claims 3, 7, 11 and 15 stand rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,991,063 to Ando in view of U.S. Patent No. 5,671,077 to Imakawa et al. Reconsideration of this rejection is respectfully requested in view of the above amendment to base claim 3. As amended, base claim 3 includes the same limitation as quoted in the paragraph above. Ando is similar to Ishibe et al. in that its lens is also an $f \cdot \theta$ scanning lens having a distortion that far exceeds 2 %. In Ando (just as in Ishibe et al.), a rotating scanning mirror is

required to be used in conjunction with using the $f \cdot \theta$ scanning lens so as to image a light source onto a scanning surface as the scanning mirror rotates. The light source is sequentially modulated with image information. Such a system is similar to, and thus inherently has the same problems as, the prior art systems discussed at page 1, lines 1 - 17 of Applicant's specification. As claims 7, 11 and 15 are dependent claims that, directly or indirectly, depend from claim 3, claims 7, 11 and 15 should now be allowable over the prior art of record at least for the reason, discussed above, that claim 3 should now be allowable.

Claim 2 stands rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,067,106 to Ishibe et al. in view of U.S. Patent No. 5,912,768 to Sissom et al. Reconsideration of this rejection is respectfully requested in view of the above amendment to claim 1. As claim 2 depends from claim 1, claim 2 should now be allowable over the prior art of record at least for the reason, discussed above, that claim 1 now patentably distinguishes over the prior art of record.

Claims 5 and 13 stand rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,067,106 to Ishibe et al. in view of U.S. Patent No. 5,956,070 to Paoli et al. Reconsideration of this rejection is respectfully requested in view of the above amendment to claim 1. Paoli et al. in no way makes up for the deficiency of Ishibe et al., which uses an $f \cdot \theta$ scanning lens (having distortion that far exceeds 2 %) in conjunction with a scanning mirror for the purpose of making the scan rate of light reflected by the scanning mirror constant on the scanning surface, thereby permitting the rate of modulation of the light sources that form pixels of the scanning image to be constant, despite the scanning mirror geometry being such that, without a high distortion lens being used to compensate, the linear scan rate of the light reflected by the scanning mirror would increase as the edges of the scan line are approached. Thus, claims 5 and 13, each of which is a dependent claim that is directly or indirectly dependent from claim 1, should now be allowable over the prior art of record.

Claims 6, 10, 14, 17 and 19 stand rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,067,106 to Ishibe et al. in view of U.S. Patent No. 5,912,768 to Sissom et al. as applied to claim 2, and further in view of U.S. Patent No. 5,956,070 to Paoli et al.

Reconsideration of this rejection is respectfully requested in view of the above amendment to claim 1. Claim 2 depends from claim 1 and Sissom et al. in no way makes up for the deficiency of Ishibe et al. as discussed above. Thus, since claims 6, 10, 14, 17 and 19 are each dependent claims that are directly or indirectly dependent from claim 2, each of claims 6, 10, 14, 17 and 19 should now be allowable over the prior art of record.

Claims 4, 8, 12 and 16 stand rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,991,063 to Ando in view of U.S. Patent No. 5,671,077 to Imakawa et al. as applied to claim 3, and further in view of U.S. Patent No. 5,912,768 to Sissom et al.

Reconsideration of this rejection is respectfully requested in view of the above amendment to claim 3. As discussed above in discussing the rejection of claim 3, neither Ando nor Imakawa et al. suggest providing a laser array imaging lens having a distortion that does not exceed 2 %, and Sissom et al does not make up for this deficiency. As claims 4, 8, 12 and 16 are each dependent claims that, directly or indirectly, depend from claim 3, claims 4, 8, 12 and 16 should now be allowable over the prior art of record at least for the reason (discussed above) that claim 3 should now be allowable.

Claims 18 and 20 stand objected to as being dependent upon a rejected base claim, but otherwise allowable if rewritten in independent form, including all the limitations of the base claim and any intervening claims. Reconsideration of this objection is respectfully requested on the basis Applicant's base claims, as amended above, should now be allowable over the prior art of record.

Having filed a Request for Continued Examination (RCE), as well as the required fee(s), concurrently with the filing of this Amendment, and having amended base claims 1 and 3 so as to patently distinguish claims 1 - 20 from the prior art of record, it is respectfully requested that a

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Notice of Allowability be provided.

Respectfully submitted,

ARNOLD INTERNATIONAL

By /Bruce Y. Arnold/
Bruce Y. Arnold
Reg. No. 28,493

(703) 759-2991

P.O. Box 129
Great Falls, VA 22066-0129